WHAT IS CLAIMED:

1. An intervertebral implant comprising:

a first plate adapted to mate to a first vertebral body, the first plate including an elongated socket;

a second plate adapted to mate to a second vertebral body, the second plate including an elongated ball, with the elongated ball having a top surface and first and second elongated sidewalls that are substantially perpendicular to the second plate, and third and fourth end walls; and

the top surface slopes from the third end wall to the fourth end wall.

2. The implant of claim 1 wherein:

the third end wall has a height that is greater than a height of the fourth end wall.

3. The implant of claim 1 wherein:

the socket has first and second elongated sidewalls, an end wall, and an open end.

4. The implant of claim 1 including at least one of the first and second plates including a keel extending therefrom and adapted to engage a vertebral body.

5. The implant of claim 1 including a first keel extending from the first plate and adapted to engage a first vertebral body, and a second keel extending from the second plate and adapted to engage a second vertebral body.

6. The implant of claim 1 including a first keel extending from the first plate and substantially perpendicular to the elongated socket and adapted

to engage a first vertebral body, and a second keel extending from the second plate and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

7. The implant of claim 1 wherein the elongated socket has first and second sidewalls that are substantially perpendicular to the first plate.

8. The implant of claim 1 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

9. An intervertebral implant comprising:

a first plate adapted to mate to a first vertebral body, the first plate including an elongated socket;

a second plate adapted to mate to a second vertebral body, the second plate including an elongated ball, with the elongated ball having a top surface and first and second elongated sidewalls, and third and fourth end walls; and

the top surface slopes from the third end wall to the fourth end wall.

10. The implant of claim 9 wherein:

the third end wall has a height that is greater than a height of the fourth end wall.

11. The implant of claim 9 wherein:

the socket has first and second elongated sidewalls, an end wall, and an open end.

12. The implant of claim 1 including at least one of the first and second plates including a keel extending therefrom and adapted to engage a vertebral body.

13. The implant of claim 9 including a first keel extending from the first plate and adapted to engage a first vertebral body, and a second keel

extending from the second plate and adapted to engage a second vertebral body.

14. The implant of claim 9 including a first keel extending from the first plate and substantially perpendicular to the elongated socket and adapted to engage a first vertebral body, and a second keel extending from the second plate and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

15. The implant of claim 9 wherein the socket has first and second elongated sidewalls that are substantially perpendicular to the first plate.

16. The implant of claim 9 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

17. An intervertebral implant comprising:

a first plate adapted to mate to a first vertebral body, the first plate including a socket;

a second plate adapted to mate to a second vertebral body, the second plate including an elongated ball, with the elongated ball having a top surface and first and second elongated sidewalls that are substantially perpendicular to the second plate, and third and fourth end walls; and

the top surface of the elongated ball has a location between the third end wall and the fourth end wall with a height that is greater than a height of the third end wall and a height of the fourth end wall, and wherein the top surface slopes toward the third end wall and toward the fourth end wall.

18. The implant of claim 17 wherein:

the socket has first and second elongated sidewalls, an end wall, and an open end.

19. The implant of claim 17 including at least one of the first and second plates including a keel extending therefrom and adapted to engage a vertebral body.

20. The implant of claim I7 including a first keel extending from the first plate and adapted to engage a first vertebral body, and a second keel extending from the second plate and adapted to engage a second vertebral body.

21. The implant of claim 17 including a first keel extending from the first plate and substantially perpendicular to the elongated socket and adapted to engage a first vertebral body, and a second keel extending from the second plate and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

22. The implant of claim 17 wherein the first and second sidewalls of the socket are substantially perpendicular to the first plate.

23. The implant of claim 17 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

24. An intervertebral implant comprising:

a first plate adapted to mate to a first vertebral body, the first plate including a socket;

a second plate adapted to mate to a second vertebral body, the second plate including an elongated ball, with the elongated ball having a top surface and first and second elongated sidewalls, and third and fourth end walls; and

the top surface has a location between the third end wall and the fourth end wall with a height that is greater than a height of the third end wall and a height of the fourth end wall, and the top surface slopes to the third end wall and to the fourth end wall.

25. The implant of claim 24 wherein:

the socket has first and second elongated sidewalls, an end wall, and an open end.

26. The implant of claim 24 including at least one of the first and second plates including a keel extending therefrom and adapted to engage a vertebral body.

27. The implant of claim 24 including a first keel extending from the first plate and adapted to engage a first vertebral body, and a second keel extending from the second plate and adapted to engage a second vertebral body.

28. The implant of claim 24 including a first keel extending from the first plate and substantially perpendicular to the elongated socket and adapted to engage a first vertebral body, and a second keel extending from the second plate and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

29. The implant of claim 24 wherein the first and second sidewalls of the socket are substantially perpendicular to the first plate.

30. The implant of claim 24 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

31. An intervertebral implant comprising:

a pair of first plates adapted to mate to a first vertebral body, and each of the first plates including an elongated socket;

a pair of second plates adapted to mate to a second vertebral body, the each of the second plates including an elongated ball, with the elongated ball of each the second plates having a top surface and first and second elongated sidewalls that are substantially perpendicular to the respective second plates, and each the elongated ball having third and fourth end walls; and

the top surface of each the elongated ball slopes from the third end wall to the fourth end wall.

32. The implant of claim 31 wherein:

each the third end wall has a height that is greater than a height of each the fourth end wall.

33. The implant of claim 31 wherein:

each the elongated socket has first and second elongated sidewalls, an end wall, and an open end.

34. The implant of claim 31 including at least one of the pair of first plates and the pair of second plates including a keel extending from each the plate and which keel is adapted to engage a vertebral body.

35. The implant of claim 31 including a first keel extending from each plate of the pair of first plates and adapted to engage a first vertebral body, and a second keel extending from each plate of the pair of second plates and adapted to engage a second vertebral body.

36. The implant of claim 31 including a first keel extending from each plate of the pair of first plates and substantially perpendicular to the elongated socket and adapted to engage a first vertebral body, and a second keel extending from each plate of the pair of second plates and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

37. The implant of claim 31 wherein the first and second sidewalls of the elongated socket are substantially perpendicular to the first plate.

38. The implant of claim 31 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

39. The implant of claim 31 wherein the third end walls of each of the elongated balls are adjacent each other.

40. The implant of claim 32 wherein the third end walls of each of the elongated balls are adjacent each other.

41. An intervertebral implant comprising:

a pair of first plates adapted to mate to a first vertebral body, and each of the first plates including an elongated socket;

a pair of second plates adapted to mate to a second vertebral body, the each of the second plates including an elongated ball, with the elongated ball of each the second plates having a top surface and first and second elongated sidewalls, and each the elongated ball having third and fourth end walls; and

the top surface of each the elongated ball slopes from the third end wall to the fourth end wall.

42. The implant of claim 41 wherein:

each the third end wall has a height that is greater than a height of each the fourth end wall.

43. The implant of claim 41 wherein:

each the elongated socket has first and second elongated sidewalls, an end wall, and an open end.

44. The implant of claim 41 including at least one of the pair of first plates and the pair of second plates including a keel extending from each the plate and which keel is adapted to engage a vertebral body.

45. The implant of claim 41 including a first keel extending from each plate of the pair of first plates and adapted to engage a first vertebral body, and a second keel extending from each plate of the pair of second plates and adapted to engage a second vertebral body.

46. The implant of claim 41 including a first keel extending from each plate of the pair of first plates and substantially perpendicular to the elongated socket and adapted to engage a first vertebral body, and a second keel extending from each plate of the pair of second plates and substantially perpendicular to the elongated ball and adapted to engage a second vertebral body.

47. The implant of claim 41 wherein the first and second sidewalls of the elongated socket are substantially perpendicular to the first plate.

48. The implant of claim 41 wherein the third end wall and the fourth end wall are substantially perpendicular to the second plate.

49. The implant of claim 41 wherein the third end walls of each of the elongated balls are adjacent each other.

50. The implant of claim 42 wherein the third end walls of each of the elongated balls are adjacent each other.

51. An intervertebral implant comprising:

a first plate having a socket formed thereon; and

a second plate having a ball formed thereon,

wherein the ball has first and second sidewalls that are substantially perpendicular to a surface of the second plate.

52. The intervertebral implant of claim 51 wherein the ball has an upper surface that slopes from a first sidewall to a second sidewall.

53. The intervertebral implant of claim 51 wherein:

the ball is elongated and has an upper surface that slopes from a first sidewall to a second sidewall, with the first sidewall having an effective height greater than the second sidewall.

54. The intervertebral implant of claim 51 wherein the ball has an upper surface that slopes from a center location to each of the first sidewall and the second sidewall.

55. The intervertebral implant of claim 51 wherein the socket has three sidewalls and an open end.

56. The intervertebral implant of claim 51 wherein the first plate has a keel.

57. The intervertebral implant of claim 51 wherein:

the wall is elongated and has an upper surface that slopes from a center location to the first sidewall and to the second sidewall with the center location having a height that is greater than the height of the first sidewall and greater than the height of the second sidewall.

58. The intervertebral implant of claim 51 wherein the second plate has a keel.

59. The intervertebral implant of claim 51 wherein the first plate has at least one keel and the second plate has at least one keel and further wherein the keels are aligned in parallel planes.

60. The intervertebral implant of claim 55 wherein the keel has teeth.

61. The intervertebral implant of claim 58 wherein the keel has teeth.

62. The intervertebral implant of claim 59 wherein the keels have teeth.

63. The intervertebral implant of claim 51 wherein the first plate has a protrusion on a side opposite the socket.

64. The intervertebral implant of claim 51 wherein the second plate has a protrusion on a side opposite the ball.

65. The intervertebral implant of claim 63 wherein the protrusion has a profile of a right triangle.

66. The intervertebral implant of claim 64 wherein the protrusion has a profile of a right triangle.

67. The intervertebral implant of claim 51 wherein the second plate has a channel.

68. The intervertebral implant of claim 67 wherein the channel is formed adjacent the ball.

69. The intervertebral implant of claim 67 wherein the channel is formed adjacent the ball on three sides of the ball.

70. The intervertebral implant of claim 51 wherein the implant allows movement in a first direction and prevents movement in a second direction perpendicular to the first direction.

71. The intervertebral implant of claim 51 wherein the first plate has a protuberance.

72. The intervertebral implant of claim 51 wherein the first plate has a protuberance adjacent the socket.

73. The intervertebral implant of claim 72 wherein the protuberance is adjacent the socket on three sides.

74. The intervertebral implant of claim 51 wherein the socket walls are perpendicular to a surface of the first plate.

75. The intervertebral implant of claim 51 wherein the socket walls are not perpendicular to a surface of the first plate.

76. The intervertebral implant of claim 51 wherein the implant is implanted between a pair of vertebral bodies.

77. The intervertebral implant of claim 76 wherein the vertebral bodies are accessed anteriorly.

78. The intervertebral implant of claim 76 wherein the vertebral bodies are accessed posteriorly.

79. The intervertebral implant of claim 78 wherein the implant further comprises a pair of first plates and second plates.

80. The intervertebral implant of claim 79 wherein the pair of first and second plates is implanted such that there is a medial gap between each of the first plates and second plates.

81. The intervertebral implant of claim 79 wherein the pair of first plates and second plates is implanted such that the each of the first plates and second plates abut each other.

82. An intervertebral implant comprising:

a first plate having a socket formed thereon; and

a second plate having a ball formed thereon,

wherein the ball has a top that slopes from a first side to a second side and sidewalls perpendicular to a surface of the second plate.

83. The intervertebral implant of claim 82 wherein the socket has three sidewalls and an open end.

84. The intervertebral implant of claim 82 wherein the first plate has a keel.

85. The intervertebral implant of claim 82 wherein the second plate has a keel.

86. The intervertebral implant of claim 82 wherein the first plate has at least one keel and the second plate has at least one keel and further wherein the keels are not in the same plane.

87. The intervertebral implant of claim 84 wherein the keel has teeth.

88. The intervertebral implant of claim 85 wherein the keel has teeth.

89. The intervertebral implant of claim 86 wherein the keels have teeth.

90. The intervertebral implant of claim 82 wherein the first plate has a protrusion.

91. The intervertebral implant of claim 82 wherein the second plate has a protrusion.

92. The intervertebral implant of claim 90 wherein the protrusion has a profile of a right triangle.

93. The intervertebral implant of claim 91 wherein the protrusion has a profile of a right triangle.

94. The intervertebral implant of claim 82 wherein the second plate has a channel.

95. The intervertebral implant of claim 94 wherein the channel is formed adjacent the ball.

96. The intervertebral implant of claim 94 wherein the channel is formed adjacent the ball on three sides of the ball.

97. The intervertebral implant of claim 92 wherein the implant allows movement in a first direction and prevents movement in a second direction perpendicular to the first direction.

98. The intervertebral implant of claim 92 wherein the first plate has a ridge.

99. The intervertebral implant of claim 92 wherein the first plate has a ridge adjacent the socket.

100. The intervertebral implant of claim 89 wherein the ridge is adjacent the socket on three sides.

101. The intervertebral implant of claim 92 wherein the socket walls are perpendicular to a surface of the first plate.

102. The intervertebral implant of claim 92 wherein the socket walls are not perpendicular to a surface of the first plate.

103. The intervertebral implant of claim 92 wherein the vertebral bodies are accessed anteriorly.

104. The intervertebral implant of claim 92 wherein the vertebral bodies are accessed posteriorly.

105. The intervertebral implant of claim 104 wherein the implant further comprises a pair of first plates and second plates.

106. The intervertebral implant of claim 104 wherein the pair of first plates and second plates is implanted such that there is a medial gap between each of the first plates and the second plates.

107. The intervertebral implant of claim 104 wherein the pair of first plates and second plates is implanted such that each of the first plates and second plates abut each other.

108. An intervertebral implant comprising:

a first plate having a socket formed thereon; and

a second plate having a ball formed thereon,

wherein the socket has three walls and an open end.

109. The intervertebral implant of claim 108 wherein the first plate has a keel.

110. The intervertebral implant of claim 108 wherein the second plate has a keel.

111. The intervertebral implant of claim 108 wherein the first plate has at least one keel and the second plate has at least one keel and further wherein the keel of the first plates are aligned in a plane parallel to the keel of the second plate.

112. The intervertebral implant of claim 109 wherein the keel has teeth.

113. The intervertebral implant of claim 110 wherein the keel has teeth.

114. The intervertebral implant of claim 111 wherein the keels have teeth.

115. The intervertebral implant of claim 108 wherein the first plate has a protrusion.

116. The intervertebral implant of claim 108 wherein the second plate has a protrusion.

117. The intervertebral implant of claim 115 wherein the protrusion has a profile of a right triangle.

118. The intervertebral implant of claim 110 wherein the protrusion has a profile of a right triangle.

119. The intervertebral implant of claim 108 wherein the second plate has a channel.

120. The intervertebral implant of claim 119 wherein the channel is formed adjacent the ball.

121. The intervertebral implant of claim 119 wherein the channel is formed adjacent the ball on three sides of the ball.

122. The intervertebral implant of claim 108 wherein the implant allows movement in a first direction and prevents movement in a second direction perpendicular to the first direction.

123. The intervertebral implant of claim 108 wherein the first plate has a ridge.

124. The intervertebral implant of claim 108 wherein the first plate has a ridge adjacent the socket.

125. The intervertebral implant of claim 125 wherein the ridge is adjacent the socket on three sides.

126. The intervertebral implant of claim 108 wherein the socket walls are perpendicular to a surface of the first plate.

127. The intervertebral implant of claim 108 wherein the socket walls are not perpendicular to a surface of the first plate.

128. The intervertebral implant of claim 108 wherein the vertebral bodies are accessed posteriorly.

129. The intervertebral implant of claim 128 wherein the implant further comprises a pair of first plates and second plates.

130. The intervertebral implant of claim 129 wherein the pair of first plates and second plates is implanted such that there is a medial gap between the first plates and second plates.

131. The intervertebral implant of claim 129 wherein the pair of first plates and second plates is implanted such that the pair of first plates and pair of second plates abut each other.

132. An intervertebral implant comprising:

a first plate having a socket formed thereon; and

a second plate having a ball formed thereon,

wherein the second plate has a channel.

133. The intervertebral implant of claim 132 wherein the socket has three walls and an open end.

134. The intervertebral implant of claim 132 wherein the first plate has a keel.

135. The intervertebral implant of claim 132 wherein the second plate has a keel.

136. The intervertebral implant of claim 132 wherein the first plate has a keel and the second plate has a keel and further wherein the keels are not in the same plane.

137. The intervertebral implant of claim 134 wherein the keel has teeth.

138. The intervertebral implant of claim 135 wherein the keel has teeth.

139. The intervertebral implant of claim 136 wherein the keels have teeth.

140. The intervertebral implant of claim 132 wherein the first plate has a protrusion.

141. The intervertebral implant of claim 132 wherein the second plate has a protrusion.

142. The intervertebral implant of claim 140 wherein the protrusion has a profile of a right triangle.

143. The intervertebral implant of claim 141 wherein the protrusion has a profile of a right triangle.

144. The intervertebral implant of claim 132 wherein the channel is formed adjacent the ball.

145. The intervertebral implant of claim 132 wherein the channel is formed adjacent the ball on three sides of the ball.

146. The intervertebral implant of claim 132 wherein the implant allows movement in a first direction and prevents movement in a second direction perpendicular to the first direction.

147. The intervertebral implant of claim 132 wherein the first plate has a ridge.

148. The intervertebral implant of claim 132 wherein the first plate has a ridge adjacent the socket.

149. The intervertebral implant of claim 148 wherein the ridge is adjacent the socket on three sides.

150. The intervertebral implant of claim 132 wherein the socket walls are perpendicular to a surface of the first plate.

151. The intervertebral implant of claim 132 wherein the socket walls are not perpendicular to a surface of the first plate.

152. The intervertebral implant of claim 132 wherein the ball has an upper surface that slopes from a first side laterally to a second side.

153. The intervertebral implant of claim 132 wherein the ball has an upper surface that slopes from a center laterally to each of a first side and a second side.

154. The intervertebral implant of claim 132 wherein the implant is implanted between a pair of vertebral bodies.

155. The intervertebral implant of claim 154 wherein the vertebral bodies are accessed anteriorly.

156. The intervertebral implant of claim 154 wherein the vertebral bodies are accessed posteriorly.

157. The intervertebral implant of claim 160 wherein the implant further comprises a pair of first plates and second plates.

158. The intervertebral implant of claim 160 wherein the pair of first plates and second plates is implanted such that there is a medial gap between each of the plates of the pair of first plates and second plates.

159. The intervertebral implant of claim 160 wherein the pair of first plates and second plates is implanted such that each of the plates of the pair of first plates and second plates abut each other.

160. An intervertebral implant with an upper plate and a lower plate having:

a forward bending movement of ten degrees;

a rearward bending movement of five degrees;

a right lateral bending movement of five degrees;

a left lateral bending movement of five degrees;

a right axial rotation of three degrees;

a left axial rotation of three degrees; and

an inhibition of forward to rearward movement between the upper plate and the lower plate.